

## \*\*\* CHEMICAL IDENTIFICATION \*\*\*

RTECS NUMBER : QK2195000  
CHEMICAL NAME : 1-Naphthalenesulfonic acid,  
3-hydroxy-4-((1-hydroxy-2-naphthalenyl)azo)-,  
monosodium salt  
CAS REGISTRY NUMBER : 3564-14-5  
LAST UPDATED : 199701  
DATA ITEMS CITED : 2  
MOLECULAR FORMULA : C20-H13-N2-O5-S.Na  
MOLECULAR WEIGHT : 416.40  
COMPOUND DESCRIPTOR : Mutagen

## SYNONYMS/TRADE NAMES :

- \* Alizarine Blue Black OCBN
- \* Alizarine Blue Black OCGN
- \* Alizarine Blue Black OCGP
- \* Alizarine Blue OCB
- \* Azochromol Blue Black EB
- \* Calcochrome Blue Black BC
- \* Chromazine Blue Black B
- \* Chrome Blue Black BF
- \* Chrome Fast Cyanine BP
- \* Chrome Fast Cyanide G
- \* Chrome Fast Cyanine GN
- \* Chrome Fast Cyanine GNN
- \* Chrome Fast Cyanine GP
- \* Chrome Fast Cyanine GSS
- \* Chromocard Blue Black B
- \* C.I. 14640
- \* C.I. Mordant Black 3
- \* C.I. Mordant Black 3, monosodium salt
- \* Diacromo Blue G
- \* Diamond Blue Black AE
- \* Diamond Blue Black EB
- \* Diamond Blue Black EBS-CF
- \* Durochrome Blue OCG
- \* Durochrome cyanine G
- \* Durochrome Fast Cyanine 6BN
- \* Eriochrome Blue Black
- \* Eriochrome Blue Black B
- \* Eriochrome Blue Black 2B
- \* Eriochrome Blue Black BC
- \* Eriochrome Blue Black 2BP
- \* Eriochrome Blue Black BSS
- \* Eriochrome Blue Black 2G
- \* Fast chrome cyanine 6B
- \* Fast chrome cyanine G
- \* Fenakron Blue Black EB
- \* Hispacrom Blue BG
- \* Java Chrome Blue Black BN
- \* Kenachrome Black 6B
- \* Lighthouse Chrome Black 6B
- \* Mitsui Chrome Blue Black BC
- \* Omega Chrome Blue Black B
- \* Pontachrome Blue Black BB
- \* Salicine Blue Black AEF
- \* Solochromate Black 6BN
- \* Solochrome Black 6BN
- \* Sunchromine Blue Black B

- \* Superchrome Blue BC
- \* Superchrome Blue BG
- \* Tertrochrome Blue B

\*\*\* HEALTH HAZARD DATA \*\*\*

\*\* MUTATION DATA \*\*

TYPE OF TEST : Mutation in microorganisms  
TEST SYSTEM : Bacteria - Salmonella typhimurium  
DOSE/DURATION : 300 nmol/plate  
REFERENCE :

MUREAV Mutation Research. (Elsevier Science Pub. B.V., POB 211, 1000 AE  
Amsterdam, Netherlands) V.1- 1964- Volume(issue)/page/year: 116,305,1983

\*\*\* STATUS IN U.S. \*\*\*

EPA TSCA Section 8(b) CHEMICAL INVENTORY

\*\*\* END OF RECORD \*\*\*

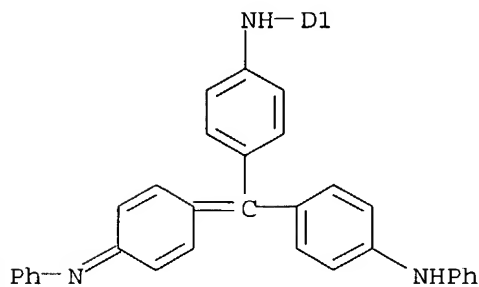
=> s 1324-76-1/rn  
L1 1 1324-76-1/RN

=> d 11

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 1324-76-1 REGISTRY  
CN Benzenesulfonic acid, [[4-[[4-(phenylamino)phenyl][4-(phenylimino)-2,5-cyclohexadien-1-ylidene]methyl]phenyl]amino]- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN C.I. Pigment Blue 61 (8CI)  
OTHER NAMES:  
CN Alkali Blue NB-D 6156D-LD  
CN C.I. 42765:1  
CN Pigment Blue 61  
CN Reflex Blue AGL  
CN Reflex Blue AGM  
CN Reflex Blue R  
CN Reflex Blue R 50  
CN Reflex Blue R 54  
CN Triphenylpararosanilinemonosulfonic acid  
DR 12738-36-2, 30283-63-7  
MF C37 H29 N3 O3 S  
CI IDS, COM  
LC STN Files: CA, CAPLUS, CHEMCATS, CHEMLIST, CIN, CSCHEM, HSDB\*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)  
DT.CA Caplus document type: Journal; Patent  
RL.P Roles from patents: MSC (Miscellaneous); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)  
RL.NP Roles from non-patents: MSC (Miscellaneous); PROC (Process); PRP (Properties); USES (Uses)



D1-SO<sub>3</sub>H



47 REFERENCES IN FILE CA (1907 TO DATE)  
47 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s 2610-05-1/rn  
L2 1 2610-05-1/RN

=> d 12

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 2610-05-1 REGISTRY

CN 1,3-Naphthalenedisulfonic acid, 6,6'-[(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[4-amino-5-hydroxy-, tetrasodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN C.I. Direct Blue 1, tetrasodium salt (8CI)

CN Chicago Blue 6B (6CI)

OTHER NAMES:

CN Airedale Blue FFD

CN Amanil Sky Blue 6B

CN Amanil Sky Blue FF

CN Atlantic Resin Fast Blue LLGG

CN Atlantic Sky Blue 6B

CN Atlantic Sky Blue FF

CN Atul Direct Sky Blue FB

CN Azine Brilliant Blue 6B

CN Azocard Blue 6B

CN Belamine Sky Blue FF

CN Benzanil Sky Blue FF

CN Benzo Brilliant Blue 6BS

CN Brasilamina Sky Blue 6B

CN Brilliant Benzo Blue

CN Brilliant Benzo Blue 6BA-CF

CN Brilliant blue 6B

CN C.I. 24410

CN C.I. Direct Blue 1

CN Calcodur Blue 6GFL

CN Calcodur Resin Fast Blue 6G

CN Calcomine Sky Blue FF

CN Chicago Blue

CN Chicago Sky Blue

CN Chicago Sky Blue 6B

CN Chloramine Sky Blue FF

CN Chlorantine Fast Blue B 5GL

CN Chlorazol Sky Blue FF

CN Chrome Leather Sky Blue GS

CN Cresotine Blue 6B

CN Diacotton Sky Blue 6B

CN Diaphtamine Blue BS

CN Diazine Sky Blue FF

CN Diazol Pure Blue 6B

CN Diphenyl Brilliant Blue FF

CN Direct Azure Blue 6B

CN Direct Blue 1

CN Direct Blue 6B

CN Direct Blue 6BS

CN Direct Blue FF

CN Direct Bright Blue

CN Direct Brilliant Blue FF

CN Direct Brilliant Blue MFF

CN Direct Brilliant Sky Blue 6B

CN Direct Pure Blue 6B

CN Direct Pure Blue FF

CN Direct Pure Sky Blue

CN Direct Sky Blue 6B

CN Direct Sky Blue 6BS

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY

MF C34 H28 N6 O16 S4 . 4 Na

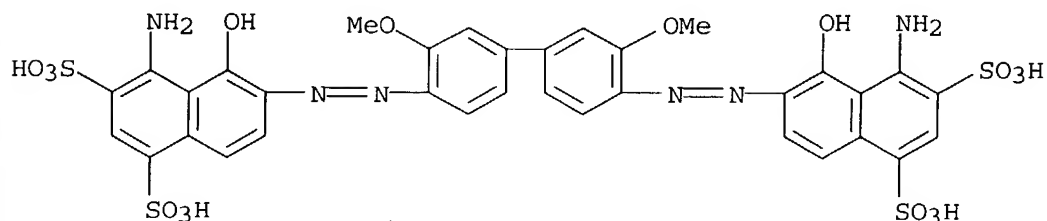
CI COM

LC STN Files: AGRICOLA, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB, MEDLINE, NIOSHTIC, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Conference; Journal; Patent; Report  
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or  
reagent); USES (Uses); NORL (No role in record)  
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
study); BIOL (Biological study); USES (Uses)  
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP  
(Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in  
record)  
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological  
study); PRP (Properties); USES (Uses)  
CRN (3841-14-3)



● 4 Na

420 REFERENCES IN FILE CA (1907 TO DATE)

6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

422 REFERENCES IN FILE CAPLUS (1907 TO DATE)

45 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s direct red 75/cn

L3 1 DIRECT RED 75/CN

=> d 13

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 2829-43-8 REGISTRY

CN 2-Naphthalenesulfonic acid, 5,5'-[carbonylbis(imino(2-sulfo-4,1-phenylene)azo)]bis[6-amino-4-hydroxy-, tetrasodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN C.I. Direct Red 75 (7CI)

CN C.I. Direct Red 75, tetrasodium salt (8CI)

CN Chlorazol Fast Pink (6CI)

OTHER NAMES:

CN Aizen Primula Pink 2BLH

CN Aizen Primula Pink 2BLH special

CN Amanil Fast Pink 2B

CN Atlantic Fast Pink 2BL

CN Belamine Fast Pink BL

CN Benzanil Fast Pink BK

CN Benzo Fast Pink 2BL

CN C.I. 25380

CN Calcodur Pick 2BL

CN Calcodur Pink 2BL

CN Chloramine Fast Pink BK

CN Chlorantine Fast Pink 2B

CN Chlorantine Fast Red 2B

CN Chlorazol Fast Pink 2BL

CN Chlorazol Fast Pink BK  
CN Chrome Leather Pink B  
CN Diazol Light Pink 2B  
CN Diphenyl Blue Red B  
CN Diphenyl Fast Pink BF  
CN Diphenyl Fast Pink BK  
CN Diphenyl Pink EBE  
CN Direct Fast Pink 4BL  
CN Direct Fast Pink B  
CN Direct Fast Pink S  
CN Direct Fast Rose S  
CN Direct Light Pink M 2BL  
CN Direct Lightfast Pink S  
CN Direct Lightfast Rose S  
CN **Direct Red 75**  
CN Eliamina Pink 2BL  
CN Fastusol Pink BBA-CF  
CN Fastusol Pink BBL  
CN Fenaluz Pink 2B  
CN Helion Pink 2B  
CN Lightfast Rose S  
CN Paranol Fast Pink 2BL  
CN Pyrazoline Pink 4BL  
CN Saturn Pink 2B  
CN Sirius Pink 2B  
CN Sirius Pink 4BL  
CN Sirius Pink BB  
CN Sirius Rose BB  
CN Sirius Supra Rubine B  
CN Solantine Pink 4BL  
CN Solar Rubine CB  
CN Solius Pink 2B  
CN Suprazo Pink 2B

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for  
DISPLAY

DR 12040-62-9, 116688-12-1

MF C33 H26 N8 O15 S4 . 4 Na

LC STN Files: CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHM,  
IFICDB, IFIPAT, IFIUDB, SPECINFO, TOXCENTER, USPAT2, USPATFULL

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

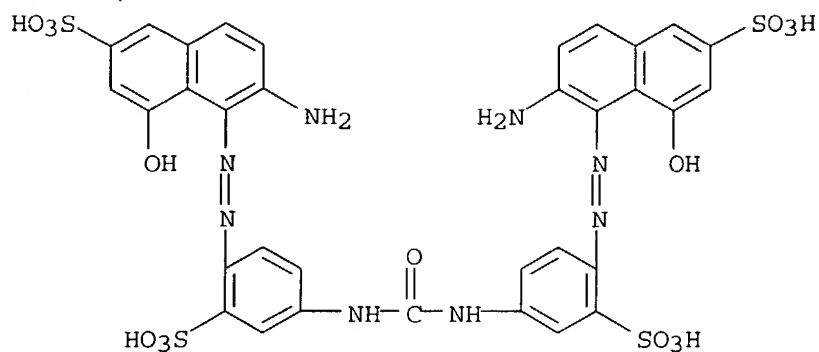
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Conference; Journal; Patent

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses); NORL  
(No role in record)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
study); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
(Reactant or reagent); USES (Uses); NORL (No role in record)

CRN (70253-90-6)



● 4 Na

114 REFERENCES IN FILE CA (1907 TO DATE)  
 114 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 12 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s 314-13-6/rn

L4 1 314-13-6/RN

=> d 14

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 314-13-6 REGISTRY

CN 1,3-Naphthalenedisulfonic acid, 6,6'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[4-amino-5-hydroxy-, tetrasodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Azovan Blue (6CI)

CN C.I. Direct Blue 53, tetrasodium salt (8CI)

OTHER NAMES:

CN 4,4'-Bis[7-(1-amino-8-hydroxy-2,4-disulfo)naphthylazo]-3,3'-bitolyl tetrasodium salt

CN C.I. 23860

CN C.I. Direct Blue 53

CN Diazol Pure Blue BF

CN Direct Blue 53

CN Evan's Blue

CN Evans Blue

CN T 1824

DR 179472-53-8

MF C34 H28 N6 O14 S4 . 4 Na

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PIRA, RTECS\*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

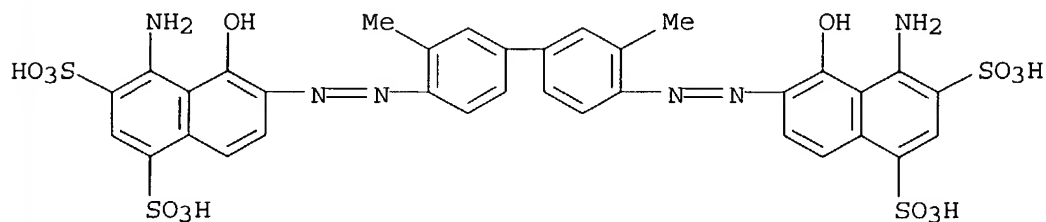
DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent; Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)  
 CRN (6968-33-8)



● 4 Na

594 REFERENCES IN FILE CA (1907 TO DATE)  
 19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 597 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 25 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s 1064-48-8/rn  
 L5 1 1064-48-8/RN

=> d 15

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 1064-48-8 REGISTRY  
 CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Amido Black 10B (6CI)  
 CN C.I. Acid Black 1 (7CI)  
 CN C.I. Acid Black 1, disodium salt (8CI)

OTHER NAMES:

CN Acid Black 1  
 CN Acid Black 10A  
 CN Acid Black 10B  
 CN Acid Black 10BA  
 CN Acid Black 10BN  
 CN Acid Black 10BX  
 CN Acid Black 12B  
 CN Acid Black 4BN  
 CN Acid Black 4BNU  
 CN Acid Black Base M  
 CN Acid Black BRX  
 CN Acid Black BX  
 CN Acid Black H  
 CN Acid Black JVS  
 CN Acid Blue Black  
 CN Acid Blue Black 10B  
 CN Acid Blue Black 10BX  
 CN Acid Blue Black B  
 CN Acid Blue Black BG  
 CN Acid Blue Black Double 600  
 CN Acid Blue Black Sh  
 CN Acid Leather Blue IGW  
 CN Acid Leather Dark Blue G  
 CN Acid Leather Fast Blue Black G  
 CN Acidal Black 10B  
 CN Acidal Navy Blue 3BR  
 CN Aciderm Black E 10B  
 CN Acilan Black 10B



CN Airedale Black 2BG  
 CN Amacid Black 10BR  
 CN Amido Black  
 CN Atul Acid Black 10BX  
 CN Atul Acid Black BX  
 CN Azanol Fast Acid Black 10B  
 CN Azo Dark Blue C 2B  
 CN Azo Dark Blue HR  
 CN Azo Dark Blue S  
 CN Azo Dark Blue SH  
 CN Black 401  
 CN Blue Black 12B  
 CN Blue Black SX  
 CN Boruta Black A  
 CN Brasilan Black BS  
 CN Bucacid Blue Black  
 CN Buffalo Black NBR  
 CN C.I. 20470  
 CN Calcocid Blue Black

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY

DR 12042-02-3, 68417-62-9, 84842-81-9, 86923-11-7, 31258-44-3

MF C22 H16 N6 O9 S2 . 2 Na

CI COM

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS,  
 CHEMLIST, CSCHM, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS,  
 NIOSHTIC, PROMT, RTECS\*, TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Conference; Journal; Patent; Report

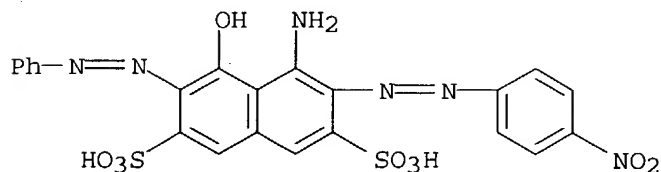
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
 OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties);  
 RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
 study); BIOL (Biological study); PREP (Preparation); PRP (Properties);  
 USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
 study); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC  
 (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);  
 NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: PREP  
 (Preparation); PRP (Properties); RACT (Reactant or reagent)

CRN (3121-74-2)



● 2 Na

645 REFERENCES IN FILE CA (1907 TO DATE)

5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

646 REFERENCES IN FILE CAPLUS (1907 TO DATE)

10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s nitro red/cn

L6 1 NITRO RED/CN

=> d 16

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 56431-61-9 REGISTRY  
CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-,  
disodium salt (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **Nitro Red**

MF C16 H12 N4 O9 S2 . 2 Na

LC STN Files: CA, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, MSDS-OHS, TOXCENTER,  
USPATFULL

Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*

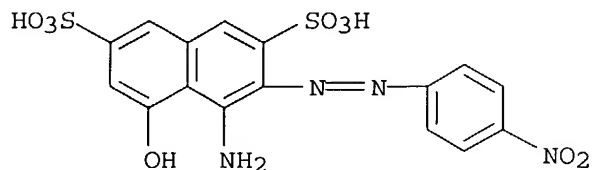
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Journal; Patent

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
PROC (Process); RACT (Reactant or reagent); USES (Uses)

RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation);  
RACT (Reactant or reagent)

CRN (21817-66-3)



● 2 Na

11 REFERENCES IN FILE CA (1907 TO DATE)

11 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d his

(FILE 'HOME' ENTERED AT 14:28:38 ON 27 MAY 2004)

FILE 'REGISTRY' ENTERED AT 14:28:45 ON 27 MAY 2004

L1 1 S 1324-76-1/RN  
L2 1 S 2610-05-1/RN  
L3 1 S DIRECT RED 75/CN  
L4 1 S 314-13-6/RN  
L5 1 S 1064-48-8/RN  
L6 1 S NITRO RED/CN

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

21.16

21.37

FILE 'CAPLUS' ENTERED AT 14:31:23 ON 27 MAY 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 27 May 2004 VOL 140 ISS 22  
FILE LAST UPDATED: 26 May 2004 (20040526/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s steam (s) formaldehyde  
191738 STEAM  
400 STEAMS  
192031 STEAM  
(STEAM OR STEAMS)  
129913 FORMALDEHYDE  
365 FORMALDEHYDES  
130017 FORMALDEHYDE  
(FORMALDEHYDE OR FORMALDEHYDES)  
L7 386 STEAM (S) FORMALDEHYDE

=> s (l1 or l2 or l3 or l4 or l5 or l6)  
47 L1  
422 L2  
114 L3  
597 L4  
647 L5  
11 L6  
L8 1718 (L1 OR L2 OR L3 OR L4 OR L5 OR L6)

=> s l8 and l7  
L9 1 L8 AND L7

=> d l9

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:473158 CAPLUS  
DN 139:41913  
TI **Steam-formaldehyde** sterilization process indicator  
inks  
IN Puntambekar, Shobha Shakher  
PA USA  
SO U.S. Pat. Appl. Publ., 6 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 2003113923	A1	20030619	US 2001-21694	20011212
	GB 2384002	A1	20030716	GB 2002-26382	20021112
	JP 2003222620	A2	20030808	JP 2002-361009	20021212
PRAI	US 2001-21694	A	20011212		

=> s steriliz? or sterilis?  
46671 STERILIZ?  
465 STERILIS?  
L10 47070 STERILIZ? OR STERILIS?

=> s 10 and l8  
3444376 10  
L11 422 10 AND L8

=> s (determin? or indicat? or measur?) (s) l10  
763156 DETERMIN?  
568344 DET

35156 DETS  
600723 DET  
(DET OR DETS)

1893919 DETD  
307954 DETG  
1443600 DETN  
128365 DETNS  
1518551 DETN  
(DETN OR DETNS)

3773451 DETERMIN?  
(DETERMIN? OR DET OR DETD OR DETG OR DETN)

1876599 INDICAT?  
2589898 MEASUR?

L12 2556 (DETERMIN? OR INDICAT? OR MEASUR?) (S) L10

=> 112 and 18

L12 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> s 112 and 18

L13 4 L12 AND L8

=> d 113 1-4

L13 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:817886 CAPLUS

DN 139:311339

TI Hydrogen peroxide and peracetic acid indicators and methods

IN Read, David M.

PA 3M Innovative Properties Company, USA

SO U.S. Pat. Appl. Publ., 24 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003194346	A1	20031016	US 2001-37435	20011231
PRAI	US 2001-37435		20011231		

L13 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:473158 CAPLUS

DN 139:41913

TI Steam-formaldehyde sterilization process indicator  
inks

IN Puntambekar, Shobha Shakher

PA USA

SO U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	GB 2384002	A1	20030716	GB 2002-26382	20021112
	JP 2003222620	A2	20030808	JP 2002-361009	20021212
PRAI	US 2001-21694	A	20011212		

L13 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:833639 CAPLUS

DN 135:376857

TI Color changing steam sterilization indicator

IN Patel, Gordhanbhai Nathalal

PA JP Laboratories, Inc., USA

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001086289	A1	20011115	WO 2001-US14604	20010507
	WO 2001086289	C1	20020613		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	EP 1281080	A1	20030205	EP 2001-935100	20010507
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	US 2003211618	A1	20031113	US 2002-275228	20021104
PRAI	US 2000-202388P	P	20000508		
	WO 2001-US14604	W	20010507		

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:417249 CAPLUS  
DN 135:37230  
TI Dye **indicators** for hydrogen peroxide **sterilization** of  
medical instruments  
IN Read, David M.  
PA 3M Innovative Properties Company, USA  
SO PCT Int. Appl., 26 pp.  
CODEN: PIXXD2

DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001040792	A1	20010607	WO 2000-US31847	20001120
	W:	AU, CA, JP			
	RW:	AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR			
	EP 1236040	A1	20020904	EP 2000-982165	20001120
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR			
	JP 2003515744	T2	20030507	JP 2001-542203	20001120
PRAI	US 1999-453726	A	19991202		
	WO 2000-US31847	W	20001120		

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 14:28:38 ON 27 MAY 2004)

FILE 'REGISTRY' ENTERED AT 14:28:45 ON 27 MAY 2004

L1 1 S 1324-76-1/RN  
L2 1 S 2610-05-1/RN  
L3 1 S DIRECT RED 75/CN  
L4 1 S 314-13-6/RN  
L5 1 S 1064-48-8/RN  
L6 1 S NITRO RED/CN

FILE 'CAPLUS' ENTERED AT 14:31:23 ON 27 MAY 2004

L7 386 S STEAM (S) FORMALDEHYDE

Evans Blue  
~~Patent Blue~~ 314-13-6  
~~Patent Blue~~ 2610-05-1  
Chicago Sky

L8 1718 S (L1 OR L2 OR L3 OR L4 OR L5 OR L6)  
L9 1 S L8 AND L7  
L10 47070 S STERILIZ? OR STERILIS?  
L11 422 S 10 AND L8  
L12 2556 S (DETERMIN? OR INDICAT? OR MEASUR?) (S) L10  
L13 4 S L12 AND L8

=> s ink (s) l10  
66732 INK  
39143 INKS  
73570 INK  
(INK OR INKS)

L14 136 INK (S) L10

=> l14 and l8

L14 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

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L15 1 L14 AND L8

=> d l15

L15 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:473158 CAPLUS  
DN 139:41913  
TI Steam-formaldehyde **sterilization** process indicator **inks**  
IN Puntambekar, Shobha Shakher  
PA USA  
SO U.S. Pat. Appl. Publ., 6 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003113923	A1	20030619	US 2001-21694	20011212
	GB 2384002	A1	20030716	GB 2002-26382	20021112
	JP 2003222620	A2	20030808	JP 2002-361009	20021212
PRAI	US 2001-21694	A	20011212		

=> s chicago sky blue 6b/cn  
L1 1 CHICAGO SKY BLUE 6B/CN

=> d 11

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 2610-05-1 REGISTRY  
CN 1,3-Naphthalenedisulfonic acid, 6,6'-[(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-  
diyl)bis(azo)]bis[4-amino-5-hydroxy-, tetrasodium salt (9CI) (CA INDEX  
NAME)

OTHER CA INDEX NAMES:

CN C.I. Direct Blue 1, tetrasodium salt (8CI)  
CN Chicago Blue 6B (6CI)

OTHER NAMES:

CN Airedale Blue FFD  
CN Amanil Sky Blue 6B  
CN Amanil Sky Blue FF  
CN Atlantic Resin Fast Blue LLGG  
CN Atlantic Sky Blue 6B  
CN Atlantic Sky Blue FF  
CN Atul Direct Sky Blue FB  
CN Azine Brilliant Blue 6B  
CN Azocard Blue 6B  
CN Belamine Sky Blue FF  
CN Benzanil Sky Blue FF  
CN Benzo Brilliant Blue 6BS  
CN Brasilamina Sky Blue 6B  
CN Brilliant Benzo Blue  
CN Brilliant Benzo Blue 6BA-CF  
CN Brilliant blue 6B  
CN C.I. 24410  
CN C.I. Direct Blue 1  
CN Calcodur Blue 6GFL  
CN Calcodur Resin Fast Blue 6G  
CN Calcomine Sky Blue FF  
CN Chicago Blue  
CN Chicago Sky Blue  
CN **Chicago Sky Blue 6B**  
CN Chloramine Sky Blue FF  
CN Chlorantine Fast Blue B 5GL  
CN Chlorazol Sky Blue FF  
CN Chrome Leather Sky Blue GS  
CN Cresotine Blue 6B  
CN Diacotton Sky Blue 6B  
CN Diaphtamine Blue BS  
CN Diazine Sky Blue FF  
CN Diazol Pure Blue 6B  
CN Diphenyl Brilliant Blue FF  
CN Direct Azure Blue 6B  
CN Direct Blue 1  
CN Direct Blue 6B  
CN Direct Blue 6BS  
CN Direct Blue FF  
CN Direct Bright Blue  
CN Direct Brilliant Blue FF  
CN Direct Brilliant Blue MFF  
CN Direct Brilliant Sky Blue 6B  
CN Direct Pure Blue 6B  
CN Direct Pure Blue FF  
CN Direct Pure Sky Blue  
CN Direct Sky Blue 6B  
CN Direct Sky Blue 6BS

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for  
DISPLAY

MF C34 H28 N6 O16 S4 . 4 Na

CI COM

LC STN Files: AGRICOLA, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA,

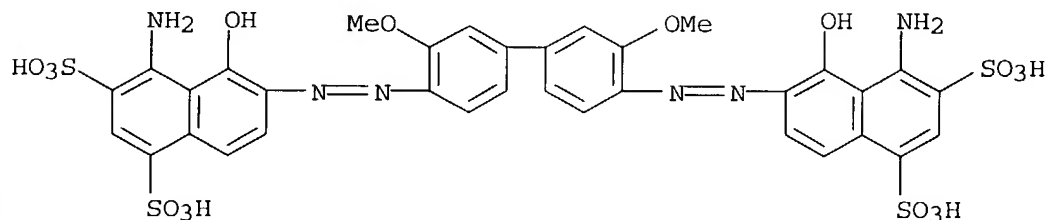
CANCERLIT, CAOLD, CAPLUS, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB, MEDLINE, NIOSHTIC, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Conference; Journal; Patent; Report  
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)  
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); USES (Uses)  
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)  
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PRP (Properties); USES (Uses)  
CRN (3841-14-3)



● 4 Na

420 REFERENCES IN FILE CA (1907 TO DATE)

6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

422 REFERENCES IN FILE CAPLUS (1907 TO DATE)

45 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s direct red 75/cn

L2 1 DIRECT RED 75/CN

=> d 12

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 2829-43-8 REGISTRY

CN 2-Naphthalenesulfonic acid, 5,5'-[carbonylbis[imino(2-sulfo-4,1-phenylene)azo]]bis[6-amino-4-hydroxy-, tetrasodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN C.I. Direct Red 75 (7CI)

CN C.I. Direct Red 75, tetrasodium salt (8CI)

CN Chlorazol Fast Pink (6CI)

OTHER NAMES:

CN Aizen Primula Pink 2BLH

CN Aizen Primula Pink 2BLH special

CN Amanil Fast Pink 2B

CN Atlantic Fast Pink 2BL

CN Belamine Fast Pink BL

CN Benzanil Fast Pink BK

CN Benzo Fast Pink 2BL

CN C.I. 25380

CN Calcodur Pick 2BL

CN Calcodur Pink 2BL



CN Chloramine Fast Pink BK  
 CN Chlorantine Fast Pink 2B  
 CN Chlorantine Fast Red 2B  
 CN Chlorazol Fast Pink 2BL  
 CN Chlorazol Fast Pink BK  
 CN Chrome Leather Pink B  
 CN Diazol Light Pink 2B  
 CN Diphenyl Blue Red B  
 CN Diphenyl Fast Pink BF  
 CN Diphenyl Fast Pink BK  
 CN Diphenyl Pink EBE  
 CN Direct Fast Pink 4BL  
 CN Direct Fast Pink B  
 CN Direct Fast Pink S  
 CN Direct Fast Rose S  
 CN Direct Light Pink M 2BL  
 CN Direct Lightfast Pink S  
 CN Direct Lightfast Rose S  
 CN **Direct Red 75**  
 CN Eliamina Pink 2BL  
 CN Fastusol Pink BBA-CF  
 CN Fastusol Pink BBL  
 CN Fenaluz Pink 2B  
 CN Helion Pink 2B  
 CN Lightfast Rose S  
 CN Paranol Fast Pink 2BL  
 CN Pyrazoline Pink 4BL  
 CN Saturn Pink 2B  
 CN Sirius Pink 2B  
 CN Sirius Pink 4BL  
 CN Sirius Pink BB  
 CN Sirius Rose BB  
 CN Sirius Supra Rubine B  
 CN Solantine Pink 4BL  
 CN Solar Rubine CB  
 CN Solius Pink 2B  
 CN Suprazo Pink 2B

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for  
DISPLAY

DR 12040-62-9, 116688-12-1

MF C33 H26 N8 O15 S4 . 4 Na

LC STN Files: CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM,  
 IFICDB, IFIPAT, IFIUDB, SPECINFO, TOXCENTER, USPAT2, USPATFULL  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

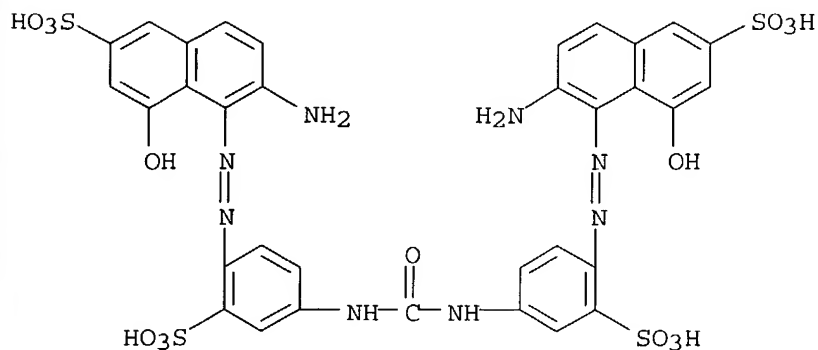
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Conference; Journal; Patent

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
 PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses); NORL  
 (No role in record)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
 study); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
 (Reactant or reagent); USES (Uses); NORL (No role in record)

CRN (70253-90-6)



● 4 Na

114 REFERENCES IN FILE CA (1907 TO DATE)  
 114 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 12 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s evans blue/cn  
 L3 1 EVANS BLUE/CN

=> d 13

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 314-13-6 REGISTRY  
 CN 1,3-Naphthalenedisulfonic acid, 6,6'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[4-amino-5-hydroxy-, tetrasodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Azovan Blue (6CI)  
 CN C.I. Direct Blue 53, tetrasodium salt (8CI)

OTHER NAMES:

CN 4,4'-Bis[7-(1-amino-8-hydroxy-2,4-disulfo)naphthylazo]-3,3'-bitolyl tetrasodium salt

CN C.I. 23860  
 CN C.I. Direct Blue 53  
 CN Diazol Pure Blue BF  
 CN Direct Blue 53  
 CN Evan's Blue

CN **Evans Blue**

CN T 1824

DR 179472-53-8

MF C34 H28 N6 O14 S4 . 4 Na

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PIRA, RTECS\*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent; Report

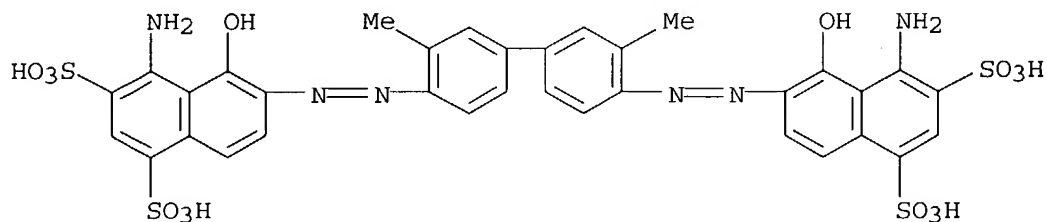
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

CRN (6968-33-8)



● 4 Na

594 REFERENCES IN FILE CA (1907 TO DATE)

19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

597 REFERENCES IN FILE CAPLUS (1907 TO DATE)

25 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s naphthol blue black/cn

L4 1 NAPHTHOL BLUE BLACK/CN

=> d 14

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 1064-48-8 REGISTRY

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Amido Black 10B (6CI)

CN C.I. Acid Black 1 (7CI)

CN C.I. Acid Black 1, disodium salt (8CI)

OTHER NAMES:

CN Acid Black 1

CN Acid Black 10A

CN Acid Black 10B

CN Acid Black 10BA

CN Acid Black 10BN

CN Acid Black 10BX

CN Acid Black 12B

CN Acid Black 4BN

CN Acid Black 4BNU

CN Acid Black Base M

CN Acid Black BRX

CN Acid Black BX

CN Acid Black H

CN Acid Black JVS

CN Acid Blue Black

CN Acid Blue Black 10B

CN Acid Blue Black 10BX

CN Acid Blue Black B

CN Acid Blue Black BG

CN Acid Blue Black Double 600

CN Acid Blue Black Sh

CN Acid Leather Blue IGW

CN Acid Leather Dark Blue G

CN Acid Leather Fast Blue Black G

CN Acidal Black 10B

CN Acidal Navy Blue 3BR

CN Aciderm Black E 10B

CN Acilan Black 10B

CN Airedale Black 2BG  
 CN Amacid Black 10BR  
 CN Amido Black  
 CN Atul Acid Black 10BX  
 CN Atul Acid Black BX  
 CN Azanol Fast Acid Black 10B  
 CN Azo Dark Blue C 2B  
 CN Azo Dark Blue HR  
 CN Azo Dark Blue S  
 CN Azo Dark Blue SH  
 CN Black 401  
 CN Blue Black 12B  
 CN Blue Black SX  
 CN Boruta Black A  
 CN Brasilan Black BS  
 CN Bucacid Blue Black  
 CN Buffalo Black NBR  
 CN C.I. 20470  
 CN Calcocid Blue Black  
 CN **Naphthol Blue Black**

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY

DR 12042-02-3, 68417-62-9, 84842-81-9, 86923-11-7, 31258-44-3

MF C22 H16 N6 O9 S2 . 2 Na

CI COM

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS,  
 CHEMLIST, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS,  
 NIOSHTIC, PROMT, RTECS\*, TOXCENTER, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Conference; Journal; Patent; Report

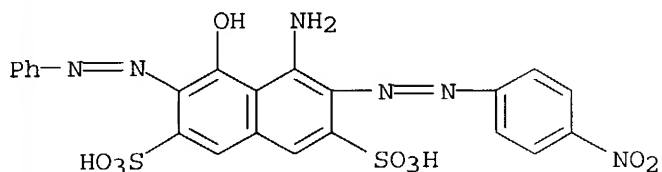
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 OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties);  
 RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
 study); BIOL (Biological study); PREP (Preparation); PRP (Properties);  
 USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
 study); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC  
 (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);  
 NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: PREP  
 (Preparation); PRP (Properties); RACT (Reactant or reagent)

CRN (3121-74-2)



● 2 Na

645 REFERENCES IN FILE CA (1907 TO DATE)

5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

646 REFERENCES IN FILE CAPLUS (1907 TO DATE)

10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s nitro red/cn

L5 1 NITRO RED/CN

=> d 15

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 56431-61-9 REGISTRY

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-,  
disodium salt (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **Nitro Red**

MF C16 H12 N4 O9 S2 . 2 Na

LC STN Files: CA, CAPLUS, CHEMCATS, CHEMLIST, CSChem, MSDS-OHS, TOXCENTER,  
USPATFULL

Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*

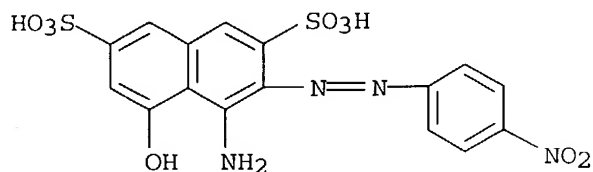
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Journal; Patent

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
PROC (Process); RACT (Reactant or reagent); USES (Uses)

RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation);  
RACT (Reactant or reagent)

CRN (21817-66-3)



● 2 Na

11 REFERENCES IN FILE CA (1907 TO DATE)

11 REFERENCES IN FILE CAPLUS (1907 TO DATE)